AST 2017 Priorities

- Keeping pace with industry.
- Continuously improving human space flight safety.
- Safely integrating commercial space operations into the National Airspace System and internationally.
- Streamlining the commercial space regulatory framework, including non-launch, space-related activities.
- Enabling new and non-traditional commercial operations in space.
- In partnership with the DoD, developing and implementing a Civil Space Traffic Management System.

Research Area	Research Goals Applicable to AST's Public Safety Mission	Research Goals Applicable to AST's Industry Promotion Mission
1. Air/Space Traffic Manage-ment and Spaceport Operations	• ~~Safe integration of air & space traffic management.~~ • Improved analytical and computational methods to evaluate safety of uninvolved public and property. • Situational awareness and understanding of risk posed by resident space objects.	• Safe and equitable sharing of the NAS by air and space transportation operators, with minimal disruption caused by commercial space traffic (outbound and inbound). • Improved spaceport interoperability and development of necessary spaceport industry infrastructure resources.
2. Space Transport-ation Vehicles	• Improve vehicle safety and risk analyses and management, including knowledge of all safety-critical components and systems of the space vehicles and their operations.	• ~~Improve the efficiency of vehicle operations.~~ • Improve the manufacturability, assembly, and operational efficiencies of space transportation vehicles, systems, and subsystems.
3. Human Spaceflight	• Facilitate the continuous improvement of the operational safety of human-carrying vehicles (during both launch and reentry) and spaceports. • ~~Protection of the health and safety of crew~~. • Identification and reduction of avoidable risks of human spaceflight.	• Protection of the health and safety of spaceflight participants. • Identification and reduction of avoidable risks of human spaceflight.
4. Industry Viability	• Develop improved criteria for evaluating public safety, such as performance based requirements for the protection of public property and critical assets.	• ~~Increase industry viability~~, Encourage the growth of evolving space industry sectors through relevant economic, legal, legislative, regulatory, and market analyses & modeling. • Support effective policy decision-making in the accomplishment of the dual regulatory and promotional missions of FAA AST. • Provide a better understanding of the relationship of governmental policy, innovation adoption, and industry growth.

AST R&D GOALS MUTUAL ACHIEVABILITY MATRIX	1S1	1S2	1P1	1P2	1P2	2P1	3S1	3P1	4S1	4P1	4P2	4P3
1S1. Improved analytical and computational methods to evaluate safety of uninvolved public and property.		NA	++	++	++	NA	NA	++	++	++	++	NA
1S2. Situational awareness and understanding of risk posed by resident space objects.	NA		NA	+	++	NA	NA	++	++	++	++	NA
1P1. Safe and equitable sharing of the NAS by air and space transportation operators, with minimal disruption caused by commercial space traffic (outbound and inbound).	NA	NA		+	NA	NA	NA	NA	NA	++	++	NA
1P2. Improved spaceport interoperability and development of necessary spaceport industry infrastructure resources.	NA	+	+		NA	+	NA	+	NA	++	++	NA
2S1. Improve vehicle safety and risk analyses and management, including knowledge of all safety-critical components and systems of the space vehicles and their operations.	++	++	NA	++		NA	++	++	++	++	NA	NA
2P1. Improve the manufacturability, assembly, and operational efficiencies of space transportation vehicles, systems, and subsystems.	NA	NA	NA	++	NA		NA	++	NA	++	++	NA
3S1. Identification and reduction of avoidable risks of human spaceflight.	NA	NA	NA	++	++	++		++	++	++	++	NA
3P1. Facilitate the continuous improvement of the operational safety of human-carrying vehicles (during both launch and reentry) and spaceports.	NA	NA	NA	NA	NA	++	NA		NA	++	++	NA
4S1. Develop improved criteria for evaluating public safety, such as performance based requirements for the protection of public property and critical assets.	++	++	++	++	++	++	++	++		++	++	NA
4P1. Encourage the growth of evolving space industry sectors through relevant economic, legal, legislative, regulatory, and market analyses & modeling.	NA	NA	++	++	NA	++	NA	++	NA		++	++
4P2. Support effective policy decision-making in the accomplishment of the dual regulatory and promotional missions of FAA AST.	NA	NA	++	++	NA	++	NA	++	NA	++		++
4P3. Provide a better understanding of the relationship of governmental policy, innovation adoption, and industry growth.	NA	NA	++	++	NA	++	NA	++	NA	++	++	

AST R&D Goal Prioritization